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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,866	07/31/2003	Mark A. Kirkpatrick	BS01-168-CON	9091

7590 02/02/2004

Aslan Baghdadi
SHAW PITTMAN LLP
1650 Tysons Boulevard
McLean, VA 22102

EXAMINER	
TSO, EDWARD H	

ART UNIT	PAPER NUMBER
2838	

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/630,866	KIRKPATRICK, MARK A.	
	Examin r	Art Unit	
	Edward H Tso	2838	AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *7/31/2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *54-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *54-67* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *7/31/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure should be carefully reviewed to ensure that any and all grammatical, idiomatic, and spelling or other minor errors are corrected.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 65-67 recite the limitation "the switch." There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 54-60 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 12, 13, 15, 17 and 18 of U.S. Patent No. 6,617,822. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant pending claims are broader than and would encompass the patented claims. The feature "an electrical connector in electrical communication between each cell and the switch" of the instant pending claim 54 covers the feature on the ultimate paragraph of patented claim 1. Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized separate connector for each photocell for the purpose of redundancy and/or isolating the damage cell from the working ones and since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 54-60 are further rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-12 and 14-16 of U.S. Patent No. 6,448,740. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are broader and would encompass the patented claims.

Claim 61 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 46 of U.S. Patent No. 6,617,822. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant pending claim is broader than and would encompass the patented claim. The feature "a battery" of the instant pending claim covers the feature "a battery of a vehicle" in the patented claim.

Claims 62-67 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 46 and 47 of U.S. Patent No. 6,617,822 in view of FUJI et al. (US 4,786,851).

Regarding the translucent sheet for protecting the cell, FUJI teaches the use of a transparent or translucent film on the solar cell (column 3, lines 35-40) for the purpose of preventing the aging of the cell which in many cases cause from foreign contaminant. It would have been obvious to have used a translucent sheet for the purpose of reducing the effect of foreign matter coming into contact with the cell in order to further the life of the cell.

Regarding the switch having a socket for the connector, FUJI teaches a socket 5, 17 with a switch 15 for the purpose of separating the battery part and the solar panel. It would have been obvious to have separated the solar panel and the battery so that replacement can be easily be made without having to rely on professional help.

Regarding the switch being a variable rate or an on/off switch, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected any appropriate switch since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

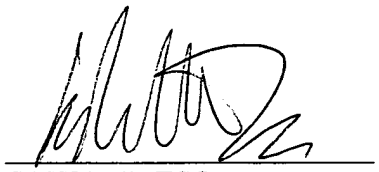
Claims 54-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over FUJI et al. (US 4,786,851). The reference discloses a photovoltaic cell for charging a battery having, *inter alia*, a solar cell (3) that converts light to electric current, a switch (15) to control the flow of current, battery connector and electrical connector electrically communicate among the cell, battery and switch. See column 3, lines 29-40; column 5, lines 50-65; column 6, lines 50-55. Furthermore it is inherent in battery charging that either the battery is maintained or increase the charge. It is the purpose of charging batteries. However the reference fails to disclose a plurality

of solar cells. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the system with multiple solar cells for the purpose of redundancy in case one of more cells break down without detriment to the system as a whole and furthermore since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Conclusion

Any inquiry concerning this communication should be directed to the Examiner at the below-listed number.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703 308 0956, Monday-Friday, 830am to 5:00pm, EST.

By: 

EDWARD TSO
Primary Examiner
703 308 2823